

NOTES ON THE SPECIES OF THE OCHROPTENA—
CIRCUMLUCENS GROUP OF PAPAPEMA
(Lepid., Phalænidæ)

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Submission of specimens for identification has caused the writer to investigate the present group. Two previously described species and one previously described subspecies are discussed; one new species and one new subspecies are described. Thanks are due to Mr. Henry Bird who has reviewed the data on which this paper is based and examined the types of the new species and subspecies.

PAPAPEMA OCHROPTENA OCHROPTENA (Dyar)

Hydræcia circumlucens Smith, Trans. Am. Ent. Soc. 1899 vol. 26, p. 43, in part ("cotype"; not types).

Gortyna ochroptena Dyar, Can. Ent. 1908, vol. 40, p. 77.

Papaipema ochroptena, Bird, Can. Ent., 1925, vol. 57, p. 304.

See notes under the following subspecies.

PAPAPEMA OCHROPTENA HUMULI (Bird)

Hydræcia circumlucens Smith, Trans. Am. Ent. Soc. 1899, vol. 26, p. 43, in part ("♀ type", which is a male, and some "cotypes"; not "♂ type"), pl. 2, f. 31 ♂ genitalia.

Papaipema humuli Bird, Can. Ent., 1915, vol. 47, p. 113.

Papaipema ochroptena humuli, Bird, Can. Ent., 1925, vol. 57, pp. 304-306.

The truncate nature of the distal portion of the harpe, together with the clasper being sharply bent at nearly a ninety-degree angle, are characters which differentiate the hop-feeding species, *ochroptena*, from its allies.

One specimen from Cartwright, Manitoba, is almost identical with typical (Colorado) *ochroptena*, while five others from the same locality show some rufous shadings and, in this respect, are intermediate to the eastern race, *humuli*.

PAPAPEMA CIRCUMLUCENS CIRCUMLUCENS (Smith)

Hydræcia circumlucens Smith, Trans. Am. Ent. Soc., 1899, vol. 26, p. 43 in part ("♂ type" and some "cotypes"; not "♀ type" which is a male, some "cotypes", and pl. 2, f. 31 ♂ genitalia).

Hydræcia baptisiæ Bird, Can. Ent., 1902, vol. 34, p. 109, pl. 3.

Papaipema circumlucens, Bird, Can. Ent., 1916, vol. 48, p. 16; Bird, Can. Ent., 1925, vol. 57, pp. 304-306.

Papaipema baptisiæ, Bird, Can. Ent., 1916, vol. 48, p. 17 (in synonymy *circumlucens*).

The non-truncate distal portion of the harpe, and the evenly curved clasper, are characters which differentiate the present species from *ochroptena*.

Papaipema circumlucens vaha Benjamin, new subspecies

Papaipema ochroptena, Barnes & McDunnough, Contrib. Nat. Hist. Lep. N. Am., 1912, vol. 1, no. 4, p. 53, in part (not pl. 25, f. 11).

This subspecies bears the same relationship to the darker typical *circumlucens* that *ochroptena ochroptena* bears to the darker *ochroptena humuli* and in consequence usually has been misidentified as *ochroptena*.

Size and markings essentially the same as in specimens of *circumlucens* from eastern localities, but the ground color of the fore wing pale yellow, scarcely powdered with rufous, the markings proportionately pale and uncontrasting. Hind wing straw color, almost devoid of the rufous tints and shadings conspicuous on specimens of typical *circumlucens*. Male genitalia essentially the same as those of the eastern (typical) subspecies. *Expanse*: ♂, 37 mm; ♀, 38 mm.

Holotype ♂, *Allotype* ♀, "X-16-8" and "IX-21-9", both Provo, Utah (Tom Spalding). *Cat. No.* 44735, U.S.N.M.

Notes: Additional specimens include a male labeled Denver, Colo., 16-23 Sept. and which has been discussed by Barnes and McDunnough as *ochroptena*, and a female labeled Richfield, Utah, 6 Sept. 1929 (David E. Fox).

Papaipema depictata Benjamin, n. sp.

Papaipema ochroptena, Barnes & McDunnough, Contrib. Nat. Hist. Lep. N. Am., 1912, vol. 1, no. 4, p. 53, in part, pl. 25, f. 11.

Color and appearance similar to *vaha*, but the fore wing with the transverse anterior space between costa and submedian fold and all of the subterminal space disconcolorously filled with dull purplish fuscous, which also strongly marks the veins and forms a heavy connecting bar between the orbicular and the reniform, the wing in consequence appearing contrastingly marked, a feature further emphasized by the lack of the usual rufous powder-

ings; reniform somewhat narrower than normal, the surrounding spots slightly reduced in size; median shade unusually erect and less nearly parallel with the transverse posterior line than normal in the group. Hind wing pale yellow slightly tinged with purple-rufous shadings. Male genitalia similar to those of *circumlucens*, but the uncus more of a diamond shape, and the penis possessing a longer spatulate spine. *Expanse*: ♂, 40 mm; ♀, 37 mm.

Holotype ♂, *Allotype* ♀, White Mts., Ariz. Cat. No. 44736 U.S.N.M.

Notes: The allotype has been figured by Barnes and McDunnough as *ochroptena*. See notes under *P. ochroptena vaha*.

ANOTHER RARE SPECIES LOCATED

It was during the summer of 1932 that my friend, Mr. Doudoroff brought a splendid looking *Æneis* back from a collecting trip in Mendocino County. Upon investigation I found that my suspicions were well founded and therefore a great deal of time was spent this season trying to obtain a series. By the end of June we succeeded in catching a number of specimens in the ravines north of Manchester, California. However, they were all males while the specimen obtained in 1932 was a female. These *Æneis* I consider one of the most beautiful of that group, and probably one of the rarest. The species is none other than *Æneis iduna* and in many collections is probably one of the rarest butterflies.

It would be an interesting thing for Lepidopterists in the future to attempt to locate a spot where *iduna* flies more abundantly, as the typical form seems to be very local. We found none at any great distance north of Point Arena and all attempts to find them more than thirty miles south of Manchester were also futile. They are very difficult to locate and not more than one specimen was ever seen at one time. Future reports on this species would be interesting.—R. F. Sternitsky.